

SEQUENCE LISTING

<110> Kirschner, Marc W.
 Kinoshita, Noriyuki

<120> Receptor-Ligand Assay

55

<130> HU95-01A2

<140> 08/776,207
 <141> 1997-06-23

<150> PCT/US95/09172
 <151> 1995-07-19

<150> 08/441,629
 <151> 1995-05-15

<150> 08/279,217
 <151> 1994-07-22

<160> 18

<170> FastSEQ for Windows Version 3.0

<210> 1
 <211> 809
 <212> DNA
 <213> Xenopus laevis

<400> 1						
accaaaaagaa	cgacagaacg	aaggaaagac	agagacagtc	cttgtttaa	gactccaggg	60
gaatttacgt	ctaataaaga	gaagagaggc	attgtatgct	tgacattatg	gtggcagttt	120
tatcttcct	gttgacaatt	tgcattatcc	ttagctttc	tctccatcc	gataaccaga	180
atataatgc	ctttatggaa	aagcacattg	ttaaggaagg	agctgaaaca	aactgcaacc	240
aaaccatcaa	agacagaaac	atccggtta	aaaacaactg	caaattccgc	aacaccttta	300
ttcatgatac	caatggtaaa	aaggtaagg	agatgtgcgc	tgggattgtc	aatatctacct	360
ttgtgatcag	caaggaactg	ctgcctctca	ctgactgctt	gttgatggga	cgtactgcaa	420
gaccccaaaa	tttgcttat	aatcaaaca	gaacaactgg	ggtcattaat	atcacttg	480
aaaacaatta	ccctgtgcac	tttgctgggt	acaaatcaag	tttctgtgc	tcatattctc	540
catgtgcctt	aatagtaata	actgtttcc	tgcctagcca	gctactgctc	cctgctatga	600
gatgatgcc	agaaacggga	gtatcaatag	ctaaaactag	aaggactgat	agtgatggat	660
gattgttcct	aagtcatat	gagatctacc	tgtgttca	tccaaacaaa	gaagacatag	720
gtataatga	atcaaccgt	acatagactg	acttctaaat	aataaaagca	acattttctg	780
tttaacaaa	aaaaaaaaaa	aaaaaaaaaa				809

<210> 2
 <211> 169
 <212> PRT
 <213> Xenopus laevis

<400> 2
 Met Leu Asp Ile Met Val Ala Val Leu Ser Ser Leu Leu Thr Ile Cys
 1 5 10 15
 Ile Ile Leu Ser Phe Ser Leu Pro Ser Asp Thr Gln Asn Ile Asn Ala
 20 25 30
 Phe Met Glu Lys His Ile Val Lys Glu Gly Ala Glu Thr Asn Cys Asn
 35 40 45
 Gln Thr Ile Lys Asp Arg Asn Ile Arg Phe Lys Asn Asn Cys Lys Phe
 50 55 60
 Arg Asn Thr Phe Ile His Asp Thr Asn Gly Lys Lys Val Lys Glu Met
 65 70 75 80
 Cys Ala Gly Ile Val Lys Ser Thr Phe Val Ile Ser Lys Glu Leu Leu
 85 90 95
 Pro Leu Thr Asp Cys Leu Leu Met Gly Arg Thr Ala Arg Pro Pro Asn
 100 105 110
 Cys Ala Tyr Asn Gln Thr Arg Thr Gly Val Ile Asn Ile Thr Cys
 115 120 125
 Glu Asn Asn Tyr Pro Val His Phe Ala Gly Tyr Lys Ser Ser Phe Cys
 130 135 140
 Ala Ser Tyr Ser Pro Cys Ala Leu Ile Val Ile Thr Val Phe Leu Leu
 145 150 155 160
 Ser Gln Leu Leu Pro Ala Met Arg
 165

<210> 3
 <211> 1633
 <212> DNA
 <213> Xenopus Laevis

<400> 3
 atttaccacc gaccgttaca cctggttttt gctaaggaca cattcaatac aagaactaaa 60
 agtggaaac tggggccttt gcagaaaaaca atgcagtttt taagatttct tgccatcctt 120
 attttctctg ctaaacattt tatcaagcat tgcaaagggtg aaacttgcattt gggactgaac 180
 tgtaatgacc caaggttatt ggaggcaatt aagagcaaca caatcaatca gctcttgcattt 240
 gatacaatta atgcccaccca tggaaagagt ccaccaaaat ccactaaac cttggcccttc 300
 ttgggtatca cagacagttaa gaaattgaat agaaaatgct gtcagaatgg aggcacttgt 360
 ttcttggga ccttttgcattt ctgccttaag caatttactg gtccggcactg tgaacatgaa 420
 aggaggccag caagctgctc cgggtttccc catggagact ggatccgtca gggctgtttt 480
 ctgtgttagat gtgtgtctgg tgcacatcac tgcctcaagc ccgagtcgttggactgtgat 540
 gttgtgcattt aaaaaaaat gagatcgggg gtcccgagaa tgcagctcattt cttaatcatc 600
 tattgtttcc ttactgcattt cttgttttac cacatagttt ggcattgttattt tattggactt 660
 taacagagta acttgagtct gcccaggatttgc agacgtctgt gtctacactg 720
 cactttcaat ttgtgaaccc attttgcattt gattatgctt gaagttatgt gctatcttcc 780
 acccctggaa tcctggaaaa tatgcagaaaa ctatataatgc ctttatcttattt attgggtt 840
 tcataaaaata acttttttta taggatgttgc tgcatttttgc agacgtctgt gtctacactg 900
 ttccaaaggac tggcggttgc tcaaaatagc tactgggttc ttgcttttgc tgcatttttgc 960

agatcaggaa	gctagtctta	tacttaccca	gtgcattctg	tatataatgt	aattttatta	1020
acttattaga	cacgttgtac	attaacagca	tccttcacaa	acttttattt	tttttaatt	1080
tttttattaa	ttgacaaaaga	gaacaaaagta	tcttaggaaca	ttttacaaat	attgtcctac	1140
tacattgcat	gttgggttac	ttgtttgtat	gttggcctg	atcttctaca	atgtatccct	1200
agccataaaa	cgatttgtg	agtgtgtgt	tgtactgca	tcccatat	ttcattatgc	1260
aaacactttg	caaataatgt	tgcaatgt	taagtgttag	cctgtggtca	acagtgtga	1320
atgtaaatct	tggagcggtg	atatacagat	gcttatggag	gotcaataac	cttggtcttg	1380
ccccctttaaa	ttcttatttt	ctacggccaa	gttaatctaa	actggtaaag	taccttcttt	1440
taagggaaatg	aatcactgaa	tgttataatt	ccagtttcag	gccacagaca	attaatgaca	1500
gctcaggaa	taatacaatt	gcccatttt	gatgcaccta	atgtactgta	tgtattacag	1560
ggtgtctgct	tgatgtttgc	aatgaagaca	ttaataactg	tacataaaaag	aaaaaaaaaa	1620
aaaaaaaaaa	aaa					1633

<210> 4
 <211> 190
 <212> PRT
 <213> Xenopus laevis

Met Gln Phe Leu Arg Phe Leu Ala Ile Leu Ile Phe Ser Ala Lys His					
1	5	10	15		
Phe Ile Lys His Cys Lys Gly Glu Thr Cys Met Gly Leu Asn Cys Asn					
20	25	30			
Asp Pro Arg Leu Leu Glu Ala Ile Lys Ser Asn Thr Ile Asn Gln Leu					
35	40	45			
Leu His Asp Thr Ile Asn Ala Thr His Gly Lys Ser Pro Pro Lys Ser					
50	55	60			
Thr Lys Thr Leu Pro Phe Leu Gly Ile Thr Asp Ser Lys Lys Leu Asn					
65	70	75	80		
Arg Lys Cys Cys Gln Asn Gly Gly Thr Cys Phe Leu Gly Thr Phe Cys					
85	90	95			
Ile Cys Pro Lys Gln Phe Thr Gly Arg His Cys Glu His Glu Arg Arg					
100	105	110			
Pro Ala Ser Cys Ser Gly Val Pro His Gly Asp Trp Ile Arg Gln Gly					
115	120	125			
Cys Leu Leu Cys Arg Cys Val Ser Gly Val Leu His Cys Phe Lys Pro					
130	135	140			
Glu Ser Glu Asp Cys Asp Val Val His Glu Lys Asn Met Arg Ser Gly					
145	150	155	160		
Val Pro Arg Met Gln Leu Ser Leu Ile Ile Tyr Cys Phe Leu Thr Ala					
165	170	175			
Asn Leu Phe Tyr His Ile Val Trp His Leu Asn Ile Gly Leu					
180	185	190			

<210> 5
 <211> 124
 <212> PRT
 <213> Bovine

<400> 5
 Ala Gln Asp Asp Tyr Arg Tyr Ile His Phe Leu Thr Gln His Tyr Asp
 1 5 10 15
 Ala Lys Pro Lys Gly Arg Asn Asp Glu Tyr Cys Phe Asn Met Met Lys
 20 25 30
 Asn Arg Arg Thr Arg Pro Cys Lys Asp Arg Asn Thr Phe Ile His Gly
 35 40 45
 Asn Lys Asn Asp Ile Lys Ala Ile Cys Glu Asp Arg Asn Gly Gln Pro
 50 55 60
 Tyr Arg Gly Asp Leu Arg Ile Ser Lys Ser Glu Phe Gln Ile Thr Ile
 65 70 75 80
 Cys Lys His Lys Gly Gly Ser Ser Arg Pro Pro Cys Arg Tyr Gly Ala
 85 90 95
 Thr Glu Asp Ser Arg Val Ile Val Val Gly Cys Glu Asn Gly Leu Pro
 100 105 110
 Val His Phe Asp Glu Ser Phe Ile Thr Arg Pro His
 115 120

<210> 6
 <211> 131
 <212> PRT
 <213> Chinese Hamster

<400> 6
 Val Gln Pro Ser Leu Gly Lys Glu Ser Ala Ala Met Lys Phe Glu Arg
 1 5 10 15
 Gln His Met Asp Ser Thr Val Ala Thr Ser Ser Ser Pro Thr Tyr Cys
 20 25 30
 Asn Gln Met Met Lys Arg Arg Asn Met Thr Gln Gly Gln Glu Cys Lys
 35 40 45
 Pro Val Asn Thr Phe Val His Glu Ser Leu Ala Asp Val His Ala Val
 50 55 60
 Cys Ser Gln Glu Asn Val Lys Cys Lys Asn Gly Lys Ser Asn Cys Tyr
 65 70 75 80
 Lys Ser His Ser Ala Leu His Ile Thr Asp Cys Arg Leu Lys Gly Asn
 85 90 95
 Ala Lys Tyr Pro Asn Cys Asp Tyr Gln Thr Ser Gln His Gln Lys His
 100 105 110
 Ile Ile Val Ala Cys Glu Gly Asn Pro Phe Val Pro Val His Phe Asp
 115 120 125
 Ala Thr Val
 130

<210> 7
 <211> 160
 <212> PRT
 <213> Mus musculus

<400> 7
 Met Gly Tyr Phe Ser Ser Ser Val Val Leu Leu Val Ala Ile Ser Ser
 1 5 10 15
 Ala Phe Glu Phe Gly Pro Val Ala Gly Arg Asp Leu Ala Ile Arg Asp
 20 25 30
 Asn Ser Ile Trp Asp Gln Lys Glu Pro Ala Val Arg Asp Arg Ser Phe
 35 40 45
 Gln Phe Val Pro Ser Val Gly Ile Gln Asn Ser Lys Ser Leu Asn Lys
 50 55 60
 Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu Gly Ser Phe Cys Ala
 65 70 75 80
 Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys
 85 90 95
 Glu His Cys Gly Ser Ile Leu His Gly Thr Trp Leu Pro Lys Lys Cys
 100 105 110
 Ser Leu Cys Arg Cys Trp His Gly Gln Leu His Cys Leu Pro Gln Thr
 115 120 125
 Phe Leu Pro Gly Cys Asp Gly His Val Met Asp Gln Asp Leu Lys Ala
 130 135 140
 Ser Arg Thr Pro Cys Gln Thr Pro Ser Val Thr Thr Phe Met Leu
 145 150 155 160

<210> 8
 <211> 150
 <212> PRT
 <213> Homo sapien

<400> 8
 Met Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala Leu Pro Glu Asp Gly
 1 5 10 15
 Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp Pro Lys Arg Leu
 20 25 30
 Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg
 35 40 45
 Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu
 50 55 60
 Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn
 65 70 75 80
 Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys
 85 90 95
 Val Thr Asp Glu Cys Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr
 100 105 110
 Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp Tyr Val Ala Leu Lys
 115 120 125
 Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr Gly Pro Gly Gln Lys
 130 135 140

Ala Ile Leu Phe Leu Pro
145 150

<210> 9
<211> 149
<212> PRT
<213> Bovine

<400> 9
Met Ala Glu Gly Glu Thr Thr Phe Thr Ala Leu Thr Glu Lys Phe
1 5 10 15
Asn Leu Pro Leu Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser
20 25 30
Asn Gly Gly Tyr Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly
35 40 45
Thr Lys Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Cys Ala Glu
50 55 60
Ser Ile Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Phe Leu
65 70 75 80
Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu
85 90 95
Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr
100 105 110
Ile Ser Lys Lys His Ala Glu Lys His Trp Phe Val Gly Leu Lys Lys
115 120 125
Asn Gly Arg Ser Lys Leu Gly Pro Arg Thr His Phe Gly Gln Lys Ala
130 135 140
Ile Leu Phe Leu Pro
145

<210> 10
<211> 206
<212> PRT
<213> Homo sapiens

<400> 10
Met Ser Gly Pro Gly Thr Ala Ala Val Ala Leu Leu Pro Ala Val Leu
1 5 10 15
Leu Ala Leu Leu Ala Pro Trp Ala Gly Arg Gly Gly Ala Ala Ala Pro
20 25 30
Thr Ala Pro Asn Gly Thr Leu Glu Ala Glu Leu Glu Arg Arg Trp Glu
35 40 45
Ser Leu Val Ala Leu Ser Leu Ala Arg Leu Pro Val Ala Ala Gln Pro
50 55 60
Lys Glu Ala Ala Val Gln Ser Gly Ala Gly Asp Tyr Leu Leu Gly Ile
65 70 75 80
Lys Arg Leu Arg Arg Leu Tyr Cys Asn Val Gly Ile Gly Phe His Leu
85 90 95
Gln Ala Leu Pro Asp Gly Arg Ile Gly Gly Ala His Ala Asp Thr Arg
100 105 110

Asp Ser Leu Leu Glu Leu Ser Pro Val Glu Arg Gly Val Val Ser Ile
 115 120 125
 Phe Gly Val Ala Ser Arg Phe Phe Val Ala Met Ser Ser Lys Gly Lys
 130 135 140
 Leu Tyr Gly Ser Pro Phe Phe Thr Asp Glu Cys Thr Phe Lys Glu Ile
 145 150 155 160
 Leu Leu Pro Asn Asn Tyr Asn Ala Tyr Glu Ser Tyr Lys Tyr Pro Gly
 165 170 175
 Met Phe Ile Ala Leu Ser Lys Asn Gly Lys Thr Lys Lys Gly Asn Arg
 180 185 190
 Val Ser Pro Thr Met Lys Val Thr His Phe Leu Pro Arg Leu
 195 200 205

<210> 11
 <211> 187
 <212> PRT
 <213> Xenopus laevis

<400> 11
 Met Thr Val Pro Ser Ala Leu Val Pro Ile Leu Leu Gly Thr Ala
 1 5 10 15
 Ala Val Met Val Gln Cys Leu Pro Leu Ser Phe Gln Arg Asn Asp Thr
 20 25 30
 Val Glu Arg Arg Trp Glu Thr Leu Phe Ser Arg Ser Met Gly Glu Lys
 35 40 45
 Lys Asp Thr Ser Arg Asp Ser Asp Tyr Leu Leu Gly Ile Lys Arg Gln
 50 55 60
 Arg Arg Leu Tyr Cys Asn Val Gly Ile Gly Phe His Ile Gln Val Leu
 65 70 75 80
 Pro Asp Gly Arg Ile Asn Gly Met His Ser Glu Asn Arg Tyr Ser Leu
 85 90 95
 Leu Glu Leu Ser Pro Val Glu Val Gly Val Val Ser Leu Tyr Gly Val
 100 105 110
 Lys Ser Gly Met Phe Val Ala Met Asn Ala Lys Gly Lys Leu Tyr Gly
 115 120 125
 Ser Arg Tyr Phe Asn Glu Glu Cys Lys Phe Lys Glu Thr Leu Leu Pro
 130 135 140
 Asn Asn Tyr Asn Ala Tyr Glu Ser Arg Lys Tyr Pro Gly Met Tyr Ile
 145 150 155 160
 Ala Leu Gly Lys Asn Gly Arg Thr Lys Lys Gly Asn Arg Val Ser Pro
 165 170 175
 Thr Met Thr Leu Thr His Phe Leu Pro Arg Ile
 180 185

<210> 12
 <211> 198
 <212> PRT
 <213> Homo sapien

<400> 12
 Met Ser Arg Gly Ala Gly Arg Leu Gln Gly Thr Leu Trp Ala Leu Val
 1 5 10 15
 Phe Leu Gly Ile Leu Val Gly Met Val Val Pro Ser Pro Ala Gly Thr
 20 25 30
 Arg Ala Asn Asn Thr Leu Leu Asp Ser Arg Gly Trp Gly Thr Leu Leu
 35 40 45
 Ser Arg Ser Arg Ala Gly Leu Ala Gly Glu Ile Ala Gly Val Asn Trp
 50 55 60
 Glu Ser Gly Tyr Leu Val Gly Ile Lys Arg Gln Arg Arg Leu Tyr Cys
 65 70 75 80
 Asn Val Gly Ile Gly Phe His Leu Gln Val Leu Pro Asp Gly Arg Ile
 85 90 95
 Ser Gly Thr His Glu Glu Asn Pro Tyr Ser Leu Leu Glu Ile Ser Thr
 100 105 110
 Val Glu Arg Gly Val Val Ser Leu Phe Gly Val Arg Ser Ala Leu Phe
 115 120 125
 Val Ala Met Asn Ser Lys Gly Arg Leu Tyr Ala Thr Pro Ser Phe Gln
 130 135 140
 Glu Glu Cys Lys Phe Arg Glu Thr Leu Leu Pro Asn Asn Tyr Asn Ala
 145 150 155 160
 Tyr Glu Ser Asp Leu Tyr Gln Gly Thr Tyr Ile Ala Leu Ser Lys Tyr
 165 170 175
 Gly Arg Val Lys Arg Gly Ser Lys Val Ser Pro Ile Met Thr Val Thr
 180 185 190
 His Phe Leu Pro Arg Ile
 195

<210> 13
 <211> 219
 <212> PRT
 <213> Homo sapien

<400> 13
 Met Ser Leu Ser Phe Leu Leu Leu Phe Phe Ser His Leu Ile Leu
 1 5 10 15
 Ser Ala Trp Ala His Gly Glu Lys Arg Leu Ala Pro Lys Gly Gln Pro
 20 25 30
 Gly Pro Ala Ala Thr Asp Arg Asn Pro Ile Gly Ser Ser Ser Arg Ser
 35 40 45
 Ser Ser Ser Ala Met Ser Ser Ser Ala Ser Ser Ser Pro Ala Ala
 50 55 60
 Ser Leu Gly Ser Gln Gly Ser Gly Leu Glu Gln Ser Ser Phe Gln Trp
 65 70 75 80
 Ser Pro Ser Gly Arg Arg Thr Gly Ser Leu Tyr Cys Arg Val Gly Ile
 85 90 95

Gly Phe His Leu Gln Ile Tyr Pro Asp Gly Lys Val Asn Gly Ser His
 100 105 110
 Glu Ala Asn Met Leu Ser Val Leu Glu Ile Phe Ala Val Ser Gln Gly
 115 120 125
 Ile Val Gly Ile Arg Gly Val Phe Ser Asn Lys Phe Leu Ala Met Ser
 130 135 140
 Lys Lys Gly Lys Leu His Ala Ser Ala Lys Phe Thr Asp Asp Cys Lys
 145 150 155 160
 Phe Arg Glu Arg Phe Gln Glu Asn Ser Tyr Asn Thr Tyr Ala Ser Ala
 165 170 175
 Ile His Arg Thr Glu Lys Thr Gly Arg Glu Trp Tyr Val Ala Leu Asn
 180 185 190
 Lys Arg Gly Lys Ala Lys Arg Gly Cys Ser Pro Arg Val Lys Pro Gln
 195 200 205
 His Ile Ser Thr His Phe Leu Pro Arg Phe Lys
 210 215

<210> 14
 <211> 190
 <212> PRT
 <213> Homo sapien

<400> 14
 Met His Lys Trp Ile Leu Thr Trp Ile Leu Pro Thr Leu Leu Tyr Arg
 1 5 10 15
 Ser Cys Phe His Ile Ile Cys Leu Val Gly Thr Ile Ser Leu Ala Cys
 20 25 30
 Asn Asp Met Thr Pro Glu Gln Met Ala Thr Asn Val Asn Cys Ser Ser
 35 40 45
 Pro Glu Arg His Thr Arg Ser Tyr Asp Tyr Met Glu Gly Gly Asp Ile
 50 55 60
 Arg Val Arg Arg Leu Phe Cys Arg Thr Gln Trp Tyr Leu Arg Ile Asp
 65 70 75 80
 Lys Arg Gly Lys Val Lys Gly Thr Gln Glu Met Lys Asn Asn Tyr Asn
 85 90 95
 Ile Met Glu Ile Arg Thr Val Ala Val Gly Ile Val Ala Ile Lys Gly
 100 105 110
 Val Glu Ser Glu Phe Tyr Leu Ala Met Asn Lys Glu Gly Lys Leu Tyr
 115 120 125
 Ala Lys Lys Glu Cys Asn Glu Asp Cys Asn Phe Lys Glu Leu Ile Leu
 130 135 140
 Glu Asn His Tyr Asn Thr Tyr Ala Ser Ala Lys Trp Thr His Asn Gly
 145 150 155 160
 Gly Glu Met Phe Val Ala Leu Asn Gln Lys Gly Ile Pro Val Arg Gly
 165 170 175
 Lys Lys Thr Lys Lys Glu Gln Lys Thr Ala His Phe Leu Pro
 180 185 190

<210> 15
 <211> 183
 <212> PRT
 <213> *Mus musculus*

<400> 15
 Met Gly Leu Ile Trp Leu Leu Leu Ser Leu Leu Glu Pro Ser Trp
 1 5 10 15
 Pro Thr Thr Gly Pro Gly Thr Arg Leu Arg Arg Asp Ala Gly Gly Arg
 20 25 30
 Gly Gly Val Tyr Glu His Leu Gly Gly Ala Pro Arg Arg Arg Lys Leu
 35 40 45
 Tyr Cys Ala Thr Lys Tyr His Leu Gln Leu His Pro Ser Gly Arg Val
 50 55 60
 Asn Gly Ser Leu Glu Asn Ser Ala Tyr Ser Ile Leu Glu Ile Thr Ala
 65 70 75 80
 Val Glu Val Gly Val Val Ala Ile Lys Gly Leu Phe Ser Gly Arg Tyr
 85 90 95
 Leu Ala Met Asn Lys Arg Gly Arg Leu Tyr Ala Ser Asp His Tyr Asn
 100 105 110
 Ala Glu Cys Glu Phe Val Glu Arg Ile His Glu Leu Gly Tyr Asn Thr
 115 120 125
 Tyr Ala Ser Arg Leu Tyr Arg Thr Gly Ser Ser Gly Pro Gly Ala Gln
 130 135 140
 Arg Gln Pro Gly Ala Gln Arg Pro Trp Tyr Val Ser Val Asn Gly Lys
 145 150 155 160
 Gly Arg Pro Arg Arg Gly Phe Lys Thr Arg Arg Thr Gln Lys Ser Ser
 165 170 175
 Leu Phe Leu Pro Arg Val Leu
 180

<210> 16
 <211> 190
 <212> PRT
 <213> *Homo sapien*

<400> 16
 Met Ala Pro Leu Gly Glu Val Gly Asn Tyr Phe Gly Val Gln Asp Ala
 1 5 10 15
 Val Pro Phe Gly Asn Val Pro Val Leu Pro Val Asp Ser Pro Val Leu
 20 25 30
 Leu Ser Asp His Leu Gly Gln Ser Glu Ala Gly Gly Leu Pro Arg Gly
 35 40 45
 Pro Ala Val Thr Asp Leu Asp His Leu Lys Gly Ile Leu Arg Arg Arg
 50 55 60
 Gln Leu Tyr Cys Arg Thr Gly Phe His Leu Glu Ile Phe Pro Asn Gly
 65 70 75 80
 Thr Ile Gln Gly Thr Arg Lys Asp His Ser Arg Phe Gly Ile Leu Glu
 85 90 95
 Phe Ile Ser Ile Ala Val Gly Leu Val Ser Ile Arg Gly Val Asp Ser
 100 105 110

Gly Leu Tyr Leu Gly Met Asn Glu Lys Gly Glu Leu Tyr Gly Ser Glu
 115 120 125
 Lys Leu Thr Gln Glu Cys Val Phe Arg Glu Gln Phe Glu Glu Asn Trp
 130 135 140
 Tyr Asn Thr Tyr Ser Ser Asn Leu Tyr Lys His Val Asp Thr Gly Arg
 145 150 155 160
 Arg Tyr Tyr Val Ala Leu Asn Lys Asp Gly Thr Pro Arg Glu Gly Thr
 165 170 175
 Arg Thr Lys Arg His Gln Lys Phe Thr His Phe Leu Pro Arg
 180 185 190

<210> 17

<211> 167

<212> PRT

<213> Mus musculus

<400> 17

Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
 1 5 10 15
 Val Leu Cys Leu Gln Ala Gln His Val Arg Glu Gln Ser Leu Val Thr
 20 25 30
 Asp Gln Leu Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg
 35 40 45
 Thr Ser Gly Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala
 50 55 60
 Met Ala Glu Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp
 65 70 75 80
 Thr Phe Gly Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr
 85 90 95
 Ile Cys Met Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys
 100 105 110
 Gly Lys Asp Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr
 115 120 125
 Ala Leu Gln Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg
 130 135 140
 Lys Gly Arg Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu
 145 150 155 160
 Val His Phe Met Lys Arg Leu
 165

<210> 18

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> artificial

<400> 18
Met Ala Leu Leu Leu Leu Leu Val Pro Gly Pro Gly Ser Thr Thr
1 5 10 15
Thr Asn Asp Ala Leu Leu Glu Ser Arg Gly Ser Ala Ala Arg Asp Leu
20 25 30
Gly Lys Lys Arg Thr Arg Arg Leu Tyr Cys Arg Val Gly Gly Phe His
35 40 45
Leu Gln Ile Leu Pro Asp Gly Arg Val Asn Gly Thr His Glu Ser Asn
50 55 60
Arg Tyr Ser Leu Leu Glu Leu Ser Ala Val Glu Val Gly Val Val Ser
65 70 75 80
Ile Lys Gly Val Glu Ser Gly Leu Phe Leu Ala Met Asn Lys Lys Gly
85 90 95
Lys Leu Tyr Ala Ser Lys Lys Phe Thr Glu Glu Cys Lys Phe Lys Glu
100 105 110
Arg Leu Leu Glu Asn Asn Tyr Asn Thr Tyr Ala Ser Ala Lys Tyr Arg
115 120 125
Gly Trp Tyr Val Ala Leu Asn Lys Asn Gly Arg Pro Lys Arg Gly Ser
130 135 140
Lys Thr Ser Pro Thr Gln Lys Ala Thr His Phe Leu Pro Arg
145 150 155